

**State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review**

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Chesapeake Energy Center

NPDES Permit Number: VA0004081

Permit Writer Name: Melinda Woodruff

Date: October 28, 2011

Major [x] Minor [] Industrial [x] Municipal []

I.A. Draft Permit Package Submittal Includes:

| | Yes | No | N/A |
|---|-----|----|-----|
| 1. Permit Application? | X | | |
| 2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)? | X | | |
| 3. Copy of Public Notice? | | X | |
| 4. Complete Fact Sheet? | X | | |
| 5. A Priority Pollutant Screening to determine parameters of concern? | X | | |
| 6. A Reasonable Potential analysis showing calculated WQBELs? | X | | |
| 7. Dissolved Oxygen calculations? | | X | |
| 8. Whole Effluent Toxicity Test summary and analysis? | X | | |
| 9. Permit Rating Sheet for new or modified industrial facilities? | | | X |

I.B. Permit/Facility Characteristics

| | Yes | No | N/A |
|---|-----|----|-----|
| 1. Is this a new, or currently unpermitted facility? | | X | |
| 2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit? | X | | |
| 3. Does the fact sheet or permit contain a description of the wastewater treatment process? | X | | |

I.B. Permit/Facility Characteristics - cont.

| | Yes | No | N/A |
|--|-----|----|-----|
| 4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit? | | X | |
| 5. Has there been any change in streamflow characteristics since the last permit was developed? | | X | |

| | | | |
|---|---|---|---|
| 6. Does the permit allow the discharge of new or increased loadings of any pollutants? | | X | |
| 7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses? | X | | |
| 8. Does the facility discharge to a 303(d) listed water? | X | | |
| a. Has a TMDL been developed and approved by EPA for the impaired water? | X | | |
| b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit? | | | X |
| c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water? | X | | |
| 9. Have any limits been removed, or are any limits less stringent, than those in the current permit? | | X | |
| 10. Does the permit authorize discharges of storm water? | X | | |
| 11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production? | | X | |
| 12. Are there any production-based, technology-based effluent limits in the permit? | X | | |
| 13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures? | | X | |
| 14. Are any WQBELs based on an interpretation of narrative criteria? | X | | |
| 15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations? | | X | |
| 16. Does the permit contain a compliance schedule for any limit or condition? | | X | |
| 17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)? | | X | |
| 18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated? | | | X |
| 19. Is there any indication that there is significant public interest in the permit action proposed for this facility? | | X | |
| 20. Have previous permit, application, and fact sheet been examined? | X | | |

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Checklist – for POTWs **NA** (To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration

| | Yes | No | N/A |
|---|-----|----|-----|
| 1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)? | | | |
| 2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)? | | | |

II.B. Effluent Limits - General Elements

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)? | | | |
| 2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit? | | | |

II.C. Technology-Based Effluent Limits (POTWs)

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the permit contain numeric limits for <u>ALL</u> of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH? | | | |
| 2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133? | | | |
| a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved? | | | |
| 3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)? | | | |
| 4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits? | | | |
| 5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)? | | | |
| a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations? | | | |

II.D. Water Quality-Based Effluent Limits

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality? | | | |
| 2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL? | | | |

II.D. Water Quality-Based Effluent Limits – cont.

| | Yes | No | N/A |
|---|-----|----|-----|
| 3. Does the fact sheet provide effluent characteristics for each outfall? | | | |

| | | | |
|---|--|--|--|
| 4. Does the fact sheet document that a "reasonable potential" evaluation was performed? | | | |
| a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures? | | | |
| b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone? | | | |
| c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"? | | | |
| d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)? | | | |
| e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined? | | | |
| 5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet? | | | |
| 6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established? | | | |
| 7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)? | | | |
| 8. Does the record indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy? | | | |

II.E. Monitoring and Reporting Requirements

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations? | | | |
| a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver? | | | |
| 2. Does the permit identify the physical location where monitoring is to be performed for each outfall? | | | |
| 3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements? | | | |
| 4. Does the permit require testing for Whole Effluent Toxicity? | | | |

II.F. Special Conditions

| | Yes | No | N/A |
|---|-----|----|-----|
| 1. Does the permit include appropriate biosolids use/disposal requirements? | | | |
| 2. Does the permit include appropriate storm water program requirements? | | | |

II.F. Special Conditions – cont.

| | Yes | No | N/A |
|---|-----|----|-----|
| 3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements? | | | |
| 4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations? | | | |

| | | | |
|---|--|--|--|
| 5. Does the permit allow/authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]? | | | |
| 6. Does the permit authorize discharges from Combined Sewer Overflows (CSOs)? | | | |
| a. Does the permit require implementation of the "Nine Minimum Controls"? | | | |
| b. Does the permit require development and implementation of a "Long Term Control Plan"? | | | |
| c. Does the permit require monitoring and reporting for CSO events? | | | |
| 7. Does the permit include appropriate Pretreatment Program requirements? | | | |

II.G. Standard Conditions

| | Yes | No | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------------------|---------------------------|-----|----------------|-----------------|------------------------|--|-----------------|-----------------------------|----------------|--|---------------------------------|-----------------------|---------------------------|--|---------------|------------------------|-----------|--|------------------|-----------------------|--------------------|--|--------------|--------|----------------------|--|----------------|-------|-------------------|--|--|--|----------------------|--|
| 1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| List of Standard Conditions – 40 CFR 122.41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table> <tr> <td>Duty to comply</td><td>Property rights</td><td>Reporting Requirements</td><td></td></tr> <tr> <td>Duty to reapply</td><td>Duty to provide information</td><td>Planned change</td><td></td></tr> <tr> <td>Need to halt or reduce activity</td><td>Inspections and entry</td><td>Anticipated noncompliance</td><td></td></tr> <tr> <td>not a defense</td><td>Monitoring and records</td><td>Transfers</td><td></td></tr> <tr> <td>Duty to mitigate</td><td>Signatory requirement</td><td>Monitoring reports</td><td></td></tr> <tr> <td>Proper O & M</td><td>Bypass</td><td>Compliance schedules</td><td></td></tr> <tr> <td>Permit actions</td><td>Upset</td><td>24-Hour reporting</td><td></td></tr> <tr> <td></td><td></td><td>Other non-compliance</td><td></td></tr> </table> | | | | Duty to comply | Property rights | Reporting Requirements | | Duty to reapply | Duty to provide information | Planned change | | Need to halt or reduce activity | Inspections and entry | Anticipated noncompliance | | not a defense | Monitoring and records | Transfers | | Duty to mitigate | Signatory requirement | Monitoring reports | | Proper O & M | Bypass | Compliance schedules | | Permit actions | Upset | 24-Hour reporting | | | | Other non-compliance | |
| Duty to comply | Property rights | Reporting Requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duty to reapply | Duty to provide information | Planned change | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Need to halt or reduce activity | Inspections and entry | Anticipated noncompliance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| not a defense | Monitoring and records | Transfers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duty to mitigate | Signatory requirement | Monitoring reports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Proper O & M | Bypass | Compliance schedules | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Permit actions | Upset | 24-Hour reporting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Other non-compliance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

(To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration

| | Yes | No | N/A |
|---|-----|----|-----|
| 1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)? | X | | |
| 2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)? | X | | |

II.B. Effluent Limits - General Elements

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)? | X | | |
| 2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit? | | | X |

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Is the facility subject to a national effluent limitations guideline (ELG)? | X | | |
| a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source? | X | | |
| b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations? | | | X |
| 2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)? | X | | |
| 3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits? | X | | |
| 4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production” for the facility (not design)? | X | | |
| 5. Does the permit contain “tiered” limits that reflect projected increases in production or flow? | | X | |
| a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained? | | | X |
| 6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)? | X | | |

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.

| | Yes | No | N/A |
|---|-----|----|-----|
| 7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits? | X | | |
| 8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ? | | X | |

II.D. Water Quality-Based Effluent Limits

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality? | X | | |
| 2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL? | | X | |
| 3. Does the fact sheet provide effluent characteristics for each outfall? | X | | |
| 4. Does the fact sheet document that a “reasonable potential” evaluation was performed? | X | | |
| a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures? | X | | |
| b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone? | X | | |
| c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”? | X | | |
| d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)? | | | X |
| e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined? | X | | |
| 5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet? | X | | |
| 6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established? | X | | |
| 7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)? | X | | |
| 8. Does the fact sheet indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy? | X | | |

II.E. Monitoring and Reporting Requirements

| | Yes | No | N/A |
|--|-----|----|-----|
| 1. Does the permit require at least annual monitoring for all limited parameters? | X | | |
| a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver? | | | |
| 2. Does the permit identify the physical location where monitoring is to be performed for each outfall? | X | | |
| 3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices? | X | | |

II.F. Special Conditions

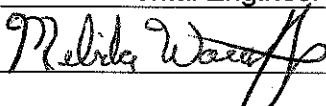
| | Yes | No | N/A |
|---|-----|----|-----|
| 1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs? | X | | |
| a. If yes, does the permit adequately incorporate and require compliance with the BMPs? | X | | |
| 2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements? | | | X |
| 3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations? | X | | |

II.G. Standard Conditions

| II.G. Standard Conditions | Yes | No | N/A |
|--|-----------------------------|---------------------------|-----|
| 1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions? | X | | |
| List of Standard Conditions – 40 CFR 122.41 | | | |
| Duty to comply | Property rights | Reporting Requirements | |
| Duty to reapply | Duty to provide information | Planned change | |
| Need to halt or reduce activity | Inspections and entry | Anticipated noncompliance | |
| not a defense | Monitoring and records | Transfers | |
| Duty to mitigate | Signatory requirement | Monitoring reports | |
| Proper O & M | Bypass | Compliance schedules | |
| Permit actions | Upset | 24-Hour reporting | |
| | | Other non-compliance | |
| 2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]? | X | | |

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

| | |
|-----------|--|
| Name | <u>Melinda Woodruff</u> |
| Title | <u>Environmental Engineer Senior</u> |
| Signature | <u></u> |
| Date | <u>November 15, 2011</u> |

VPDES PERMIT PROGRAM FACT SHEET

FILE NO: 726

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a MAJOR INDUSTRIAL permit.

1. PERMIT NO.: VA0004081 EXPIRATION DATE: January 23, 2012

2. FACILITY NAME AND LOCAL MAILING ADDRESS FACILITY LOCATION ADDRESS (IF DIFFERENT)

Virginia Electric and Power Company
Dominion-Chesapeake Energy Center
5000 Dominion Blvd.
Glenn Allen, VA 23060



2701 Veeco Street
Chesapeake, VA 23320

CONTACT AT FACILITY: CONTACT AT LOCATION ADDRESS
NAME: Cathy Taylor NAME: Paul Dickson
TITLE: Director, Electric Environmental Services TITLE:
PHONE: (804)273-2929 PHONE: ()
EMAIL: EMAIL:

3. OWNER CONTACT: (TO RECEIVE PERMIT) CONSULTANT CONTACT:
NAME: Mr. C. D. Holley NAME:
TITLE: VP-Fossil & Hydro System Operations FIRM NAME:
COMPANY NAME: ADDRESS:
ADDRESS:

PHONE: () PHONE: ()
EMAIL: EMAIL:

4. PERMIT DRAFTED BY: DEQ, Water Permits, Regional Office

Permit Writer(s): Melinda Woodruff Date(s): 09/23/2011
Reviewed By: Mark Sauer Date(s): 11/22-23/11


5. PERMIT ACTION:

() Issuance (x) Reissuance () Revoke & Reissue () Owner Modification
() Board Modification () Change of Ownership/Name [Effective Date:]

6. SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:

| | |
|----------------------|--|
| Attachment <u>1</u> | Site Inspection Report/Memorandum |
| Attachment <u>2</u> | Discharge Location/Topographic Map |
| Attachment <u>3</u> | Schematic/Plans & Specs/Site Map/Water Balance |
| Attachment <u>4</u> | TABLE I - Discharge/Outfall Description |
| Attachment <u>5</u> | TABLE II - Effluent Monitoring/Limitations |
| Attachment <u>6</u> | Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding |
| Attachment <u>7</u> | Special Conditions Rationale |
| Attachment <u>8</u> | Toxics Monitoring/Toxics Reduction/WET Limit Rationale |
| Attachment <u>9</u> | Material Stored |
| Attachment <u>10</u> | Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling |
| Attachment <u>11</u> | 303(d) Listed Segments |
| Attachment <u>12</u> | TABLE III(a) and TABLE III(b) - Change Sheets |
| Attachment <u>13</u> | NPDES Industrial Permit Rating Worksheet and EPA Permit Checklist |
| Attachment <u>14</u> | Chronology Sheet |
| Attachment <u>15</u> | Public Participation |

APPLICATION COMPLETE: September 20, 2011

7. PERMIT CHARACTERIZATION: (Check as many as appropriate)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Existing Discharge | <input checked="" type="checkbox"/> Effluent Limited |
| <input type="checkbox"/> Proposed Discharge | <input checked="" type="checkbox"/> Water Quality Limited |
| <input type="checkbox"/> Municipal | <input type="checkbox"/> WET Limit |
| SIC Code(s) | <input type="checkbox"/> Interim Limits in Permit |
| <input checked="" type="checkbox"/> Industrial | <input type="checkbox"/> Interim Limits in Other Document |
| SIC Code(s) 4911 | <input type="checkbox"/> Compliance Schedule Required |
| <input type="checkbox"/> POTW | <input type="checkbox"/> Site Specific WQ Criteria |
| <input type="checkbox"/> PVOTW | <input type="checkbox"/> Variance to WQ Standards |
| <input checked="" type="checkbox"/> Private | <input type="checkbox"/> Water Effects Ratio |
| <input type="checkbox"/> Federal | <input checked="" type="checkbox"/> Discharge to 303(d) Listed Segment |
| <input type="checkbox"/> State | <input checked="" type="checkbox"/> Toxics Management Program Required |
| <input type="checkbox"/> Publicly-Owned Industrial | <input type="checkbox"/> Toxics Reduction Evaluation |
| | <input checked="" type="checkbox"/> Storm Water Management Plan |
| | <input type="checkbox"/> Pretreatment Program Required |
| | <input type="checkbox"/> Possible Interstate Effect |
| | <input type="checkbox"/> CBP Significant Dischargers List |

8. RECEIVING WATERS CLASSIFICATION: River basin information.

Outfall No(s): 001 (incl. 101), 002 (incl. 201, 206), 013, 015, 018, 021

Receiving Stream: Deep Creek to the southern Branch of the Elizabeth River
River Mile: see attachment 10
Basin: James River (Lower)
Subbasin: NA
Section: 1d
Class: II
Special Standard(s): a, z
Tidal: YES
7-Day/10-Year Low Flow: NA
1-Day/10-Year Low Flow: NA
30-Day/5-Year Low Flow: NA
Harmonic Mean Flow: NA

Outfall No(s): 003 (incl. 301), 004, 005, 007, 008, 009, 010, 011, 012, 016, 017, 019, 020, 030, 031

Receiving Stream: Southern Branch of the Elizabeth River
River Mile: see attachment 10
Basin: James River (Lower)
Subbasin: NA
Section: 1d
Class: II
Special Standard(s): a, z
Tidal: YES
7-Day/10-Year Low Flow: NA
1-Day/10-Year Low Flow: NA
30-Day/5-Year Low Flow: NA
Harmonic Mean Flow: NA

9. FACILITY DESCRIPTION: Describe the type facility from which the discharges originate.

EXISTING industrial discharge resulting from the generation of electricity with steam produced by the combustion of fossil fuels

10. LICENSED OPERATOR REQUIREMENTS: () No (X) Yes Class: III

11. RELIABILITY CLASS: Industrial Facility - NA
12. SITE INSPECTION DATE: September 15, 2011 REPORT DATE: October 18, 2011
Performed By: Steve Long, Water Compliance
SEE ATTACHMENT 1
13. DISCHARGE(S) LOCATION DESCRIPTION: Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Norfolk South Quadrant No.: 35D SEE ATTACHMENT 2
14. ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.

SEE ATTACHMENT 3 (CAN ALSO REFERENCE TABLE I)
15. DISCHARGE DESCRIPTION: Describe each discharge originating from this facility.

SEE TABLE I (OR CAN SUBSTITUTE PAGE 2C) - SEE ATTACHMENT 4
16. COMBINED TOTAL FLOW:

TOTAL: 521 MGD (for public notice)

PROCESS FLOW: 519 (001) 1.37 (002) MGD (IND.)

NONPROCESS/RAINFALL DEPENDENT FLOW: 0.19 (Est.)
17. STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:
(Check all which are appropriate)

☒ State Water Control Law
☒ Clean Water Act
☒ VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
☒ EPA NPDES Regulation (Federal Register)
☒ EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
☒ Water Quality Standards (9 VAC 25-260-5 et seq.)
☐ Wasteload Allocation from a TMDL or River Basin Plan
18. EFFLUENT LIMITATIONS/MONITORING: Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5
19. EFFLUENT LIMITATIONS/MONITORING RATIONALE: Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

DESCRIBE IN ATTACHMENT

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).

SEE ATTACHMENT 6

20. SPECIAL CONDITIONS RATIONALE: Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 7

21. TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE: Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

SEE ATTACHMENT 8

22. SLUDGE DISPOSAL PLAN: Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

N/A

23. MATERIAL STORED: List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

SEE ATTACHMENT 9

24. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.)]. Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied. Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 10

25. **305(b)/303(d) Listed Segments:** Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to Deep Creek to the Southern Branch of the Elizabeth River and directly to the Southern Branch of the Elizabeth River. This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of 1) dissolved oxygen standard for open water - summer months, 2) fish consumption due to PCB in fish tissue and Dioxin, 3) aquatic life use - benthic organisms. A TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopener clause which will allow the it to be modified, in compliance with Section 303(d)(4) of the Act once a TMDL is approved.

EPA approved the Enterococci TMDL on July 20, 2010 for the Elizabeth Watershed Report. The facility was not assigned an individual waste load allocation for Enterococci. EPA also approved Nitrogen, phosphorus and TSS TMDL for the Chesapeake Bay TMDL on December 29, 2010. This facility was listed under the Bay Segment SMEMH as a non-significant discharger. Because an aggregate WLA exists, this permit did not receive an individual WLA. The permit contains water quality based limits for TSS and TP. The permit contains monitoring for TN and Enterococci. The permit also contains a TMDL reopener to allow the permit to be modified in the future to address individual waste load allocations.

SEE ATTACHMENT 11

26. **CHANGES TO PERMIT:** Use TABLE III(a) to record any changes from the previous permit and the rationale for those changes. Use TABLE III(b) to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 12

27. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

TOTAL SCORE: 600 SEE ATTACHMENT 13

28. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from DEQ planning.

The discharge is in conformance with the existing planning documents for the area.

OR

The discharge is not addressed in any planning document but will be included when the plan is updated.

29. **PUBLIC PARTICIPATION:** Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and the Div. of Shellfish Sanitation and noted how resolved.

The VDH reviewed the application and waived their right to comment and/or object on the adequacy of the draft permit.

The DSS provided comments by letter dated September 19, 2011.

The project is located in condemned shellfish growing waters and the activity, as described, will not cause an increase in the size or type of the existing closure.

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA waived the right to comment and/or object to the adequacy of the draft permit.

OR

EPA has no objections to the adequacy of the draft permit.

OR

By letter dated _____, the EPA provided the following comments:

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

OR

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation. Section 9 VAC 35-31-310 of the VPDES Permit Regulation states, in part, "The Board shall hold a public hearing whenever it finds, on the basis of requests, a significant degree of public interest in a draft permit(s)."

DESCRIBE PN COMMENTS AND RESOLUTIONS. PROVIDE PUBLIC HEARING DATE AND REFERENCE BACKGROUND MEMORANDUM, IF APPROPRIATE.

PUBLIC NOTICE INFORMATION:

Persons may comment in writing or by e-mail to the DEQ on the proposed reissuance of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Melinda Woodruff at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518-2174 E-mail: Melinda.Woodruff@deq.virginia.gov

Following the comment period, the Board will make a determination regarding the proposed reissuance. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

30. ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

(757) 518-2000 Fax (757) 518-2009

www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

November 1, 2011

Paul E. Dickson – Environmental Supervisor
Dominion – Chesapeake Energy Center
2701 Vepco Rd.
Chesapeake, VA 23323

Re: Technical Inspection Report,
Dominion – Chesapeake Energy Center (VA0004081)

Dear Mr. Dickson:

Enclosed is a copy of the technical inspection report prepared for the inspection conducted on September 15, 2011. Please note the deficiencies cited in this report and implement appropriate corrective measures in order to ensure continued permit compliance. Within thirty (30) days of receipt of this letter, you are requested to submit a letter documenting that the necessary corrections have been made.

This letter is not intended as a case decision under the Virginia Administrative Process Act, Va. Code § 2.2-4000 *et seq.*

If you have any questions regarding this report, please feel free to contact me at the above address or telephone (757) 518-2027.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Long", written over a horizontal line.

Steven J.E. Long
Environmental Specialist II

Enclosure

cc: DEQ/OWCP: S.G. Stell
DEQ/TRO: File

| | |
|--------------|-------------------------------------|
| Facility: | Dominion – Chesapeake Energy Center |
| County/city: | Chesapeake |

| | |
|-----------|-----------|
| VPDES NO. | VA0004081 |
|-----------|-----------|

**DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTEWATER FACILITY
INSPECTION REPORT
PART 1**

| | | | | | | | | |
|---|--|------------------------------------|---------------------------------|-----|------------|-------|-----------|-----------|
| Inspection date: | September 15, 2011 | Date form completed: | October 18, 2011 | | | | | |
| Inspection by: | Steven J.E. Long | Inspection agency: | DEQ/TRO | | | | | |
| Time spent: | 10 hours | Announced inspection: | [] Yes [✓] No | | | | | |
| Reviewed by: | Kenneth T. Raum / 10-21-11 | Photographs taken at site? | [✓] Yes [] No | | | | | |
| Present at inspection: | Paul E. Dickson – Environmental Supervisor Melinda Woodruff – DEQ Permit writer | | | | | | | |
| FACILITY TYPE: | | FACILITY CLASS: | | | | | | |
| () Municipal | | (✓) Major | | | | | | |
| (✓) Industrial | | () Minor | | | | | | |
| () Federal | | () Small | | | | | | |
| () VPA/NDC | | () High Priority () Low Priority | | | | | | |
| TYPE OF INSPECTION: | | | | | | | | |
| Routine | ✓ | Reinspection | Compliance/assistance/complaint | | | | | |
| Date of previous inspection: | 3/29/10 | Agency: | DEQ/TRO | | | | | |
| Population Served: | Connections Served | | | | | | | |
| Last Month Average Effluent: Outfall 001 | TP (mg/l) | 0.16 | TRC (mg/l) | <QL | Flow (MGD) | 618 | pH (s.u.) | 7.4 - 7.5 |
| | Other: | | | | | | | |
| Last Month Average Effluent: Outfall 002 | TP (mg/l) | 0.20 | TSS (mg/l) | 19 | Flow (MGD) | 0.598 | pH (s.u.) | 8.1 - 8.4 |
| | Other: TN = <0.30 mg/L, O&G = 5.0 mg/L, NH ₃ = <QL | | | | | | | |
| Last Month Average Effluent: Outfall 003 1 st Semi-Annual 2011 | TPH (mg/l) | * | TSS (mg/l) | 12 | Flow (MGD) | 0.247 | pH (s.u.) | 7.3 |
| | Other: Cu = <QL, Zn = 46 ug/L (dissolved metals) | | | | | | | |
| Data verified in preface: | Updated? | NO CHANGES? | | ✓ | | | | |
| Has there been any new construction? | YES | NO | ✓ | | | | | |
| If yes, were the plans and specifications approved? | YES | NO | na | | | | | |
| DEQ approval date: | na | | | | | | | |
| COPIES TO: (x) DEQ/TRO; (x) DEQ/OWCP; (x) OWNER; () OPERATOR; () EPA-Region III; () Other: | | | | | | | | |

See Inspection Comments in the Summary section of this report for all items marked with an asterisk or an X.

PLANT OPERATION AND MAINTENANCE

| | | | | | | | | | | | | |
|-----|---|-----------------------------------|---|---------------|----|------|---|----|----|---------|----|---|
| 1. | Class/number of licensed operators: | I | 1 | II | | III | 1 | IV | | Trainee | | |
| 2. | Hours per day plant manned? | 24 hours per day, 7 days per week | | | | | | | | | | |
| 3. | Describe adequacy of staffing | GOOD | √ | AVERAGE | | POOR | | | | | | |
| 4. | Does the plant have an established program for training personnel | YES | | | | | | | √ | NO | | |
| 5. | Describe the adequacy of training | GOOD | √ | AVERAGE | | POOR | | | | | | |
| 6. | Are preventative maintenance tasks scheduled | YES | | | | | | | √ | NO | | |
| 7. | Describe the adequacy of maintenance | GOOD | √ | AVERAGE | | POOR | | | | | | |
| | Does the plant experience any organic/hydraulic overloading? | YES | | | | | | | | NO | √ | |
| 8. | If yes, identify cause/impact on plant | na | | | | | | | | | | |
| 9. | Any bypassing since last inspection? | YES | | | | | | | | NO | √ | |
| 10. | Is the standby electrical generator operational? | YES | | | | | | | NO | | NA | √ |
| | How often is the standby generator exercised? | na | | | | | | | | | | |
| 11. | Power transfer switch? | na | | ALARM SYSTEM? | na | | | | | | | |
| 12. | When was the cross connection last tested on the potable supply? | na | | | | | | | | | | |
| 13. | Is the STP alarm system operational? | YES | | | | | | | NO | | NA | √ |
| 14. | Is sludge disposed in accordance with an approved SMP | YES | | | | | | | NO | | NA | √ |
| 15. | Is septage received by the facility? | YES | | | | | | | | NO | √ | |
| | Is septage loading controlled? | YES | | | | | | | NO | | NA | √ |
| | Are records maintained? | YES | | | | | | | NO | | NA | √ |

OVERALL APPEARANCE OF FACILITY

GOOD

√

AVERAGE

POOR

| PLANT RECORDS | | | | | | | | | | |
|--|---|--|---|--------------------------------|-----|-----------------|---------------------------|---|----|----|
| 1. | WHICH OF THE FOLLOWING RECORDS DOES THE PLANT MAINTAIN? | | | | | | | | | |
| | Operational logs for each process unit | | | | YES | √ | NO | | NA | |
| | Instrument maintenance and calibration | | | | YES | √ | NO | | NA | |
| | Mechanical equipment maintenance | | | | YES | √ | NO | | NA | |
| | Industrial waste contribution (municipal facilities) | | | | YES | | NO | | NA | √ |
| 2. | WHAT DOES THE OPERATIONAL LOG CONTAIN | | | | | | | | | |
| | Visual Observations | | √ | Flow Measurement | | √ | Laboratory Results | | √ | |
| | Process Adjustments | | | Control Calculations | | | Other? | | | |
| COMMENTS: Laboratory records and activity logs are maintained. | | | | | | | | | | |
| 3. | WHAT DO THE MECHANICAL EQUIPMENT RECORDS CONTAIN? | | | | | | | | NA | √ |
| | MFG. Instructions | | √ | As Built Plans/specs | | √ | Spare Parts Inventory | | √ | |
| | Lube Schedules | | √ | Other? | | √ | Equipment/parts Suppliers | | √ | |
| COMMENTS: | | | | | | | | | | |
| 4. | WHAT DO INDUSTRIAL WASTE CONTRIBUTION RECORDS CONTAIN? (MUNICIPAL) | | | | | | | | NA | √ |
| | Waste Characteristics | | | | | Impact on Plant | | | | |
| | Location and Discharge Types | | | | | Other? | | | | |
| COMMENTS: | | | | | | | | | | |
| 5. | WHICH OF THE FOLLOWING RECORDS ARE AT THE PLANT & AVAILABLE TO PERSONNEL? | | | | | | | | NA | |
| | Equipment Maintenance Records | | √ | Industrial Contributor Records | | | | | | |
| | Operational Log | | √ | Sampling/testing Records | | √ | Instrumentation Records | | √ | |
| 6. | Records not normally available to personnel at their location: | | | | Na | | | | | |
| 7. | Were the records reviewed during the inspection | | | | | | YES | | NO | √* |
| 8. | Are records adequate and the O&M manual current? | | | | | | YES | √ | NO | |
| 9. | Are the records maintained for the required 3-year time period | | | | | | YES | √ | NO | |
| COMMENTS: *Records obtained and reviewed after the site visit. | | | | | | | | | | |

| SAMPLING | | | | | | | |
|---|---|-------|---|---|-----|----------------|----|
| 1. | Are sampling locations capable of providing representative samples? | | | YES | √ | NO | |
| 2. | Do sample types correspond to VPDES permit requirements? | | | YES | √ | NO | |
| 3. | Do sampling frequencies correspond to VPDES permit requirements? | | | YES | √ | NO | |
| 4. | Does plant maintain required records of sampling? | | | YES | √ | NO | |
| 5. | Are composite samples collected in proportion to flow? | YES | | NO | | NA | √ |
| 6. | Are composite samples refrigerated during collection? | YES | | NO | | NA | √ |
| 7. | Does the plant run operational control tests? | YES | | NO | | NA | √ |
| COMMENTS: See laboratory report for additional information concerning sampling. | | | | | | | |
| TESTING | | | | | | | |
| | Who performs the testing? | Plant | √ | Central Lab | √ | Commercial Lab | √ |
| 1. | Name: Plant performs field testing. Central and Commercial laboratory performs laboratory analyses. | | | | | | |
| IF THE PLANT PERFORMS ANY TESTING, PLEASE COMPLETE QUESTIONS 2-4 | | | | | | | |
| 2. | Which total residual chlorine method is used? | | | Hach Pocket colorimeter; Std Mth 4500-Cl, G | | | |
| 3. | Does plant appear to have sufficient equipment to perform required tests? | | | | YES | * | NO |
| 4. | Does testing equipment appear to be clean and/or operable? | | | | YES | * | NO |
| COMMENTS: *Laboratory equipment not observed. | | | | | | | |
| FOR INDUSTRIAL FACILITIES WITH TECHNOLOGY BASED LIMITS ONLY | | | | | | | |
| 1. | Is the production process as described in permit application? If no, describe changes in comments section. | | | YES | | NO | NA |
| 2. | Are products/production rates as described in the permit application? If no list differences in comments section. | | | YES | | NO | NA |
| 3. | Has the Agency been notified of the changes and their impact on plant effluent? Date agency notified: | | | YES | | NO | NA |
| COMMENTS: | | | | | | | |

| PROBLEMS IDENTIFIED AT LAST INSPECTION | | CORRECTED | NOT CORRECTED |
|--|--|-----------|------------------|
| None noted. | | | |
| | | | |

SUMMARY

INSPECTION COMMENTS:

Arrived on site at 0945 to perform unannounced inspection and reached Mr. Paul Dickson through the security office. Mr. Dickson was off site at the time though made arrangements to return to the facility at 1100. Agency personnel returned to the site at 1100 and met with Mr. Dickson. Discussed the site visit including a review and familiarization for Ms. Melinda Woodruff the facility's permit writer. A site survey was conducted reviewing a majority of the site though not all areas were observed. No housekeeping issues were noted from the survey with the site appearing to be well managed.

A review of the Stormwater Pollution Prevention Plan (SWP3) finds a well prepared document. The plan date is November 2009 and was signed, including the non-stormwater certification December 2009. The last non-stormwater discharge assessment and certification was signed June 2011.

The plan provides that inspections are performed on a weekly, monthly and quarterly basis. Inspection records were provided and well documented and detailed. Training is performed annually and is also well documented with training last performed October 2010.

The comprehensive site compliance evaluation is conducted annually and is also well prepared. The last inspection was conducted December 2010 and detailed the scope of the inspection, but did not identify any non-compliance issues for the summary report. Two action items were identified for Outfalls 016 and 010 and were completed within the month. The evaluation is signed but does not include the certification reference in Part I.F.4.d.4.(c) stating that the evaluation is to be signed according to Part II.K. This has been discussed with the facility contact and a certification required by Part II.K has been added.

Representative discharges are noted in the Permit with Outfall 016 representing Outfall 017. A review of the SWP3 finds nothing in the plan for the representative sampling. Part I.F.3.d of the Permit provides that representative sampling is acceptable though there is information required to be included in the SWP3. Representative monitoring is also allowed for the quarterly visual monitoring required under Part I.F.3.e though from the records review it appears that sampling for this monitoring is performed at Outfall 017. Facility personnel will be reviewing this requirement and making additions as needed for resolution.

Page 41 of the SWP3 details the "regularly occurring discharges of allowable non-stormwater discharges" as required by Part I.F.3.g.2. This includes "fire fighting activities" which should not be a "regularly occurring discharge". This item is to be eliminated from the SWP3. Page 41 also lists routine wash down - "As necessary to control slip hazards created in wet areas". From this description it was not clear which of the non-stormwater discharges this was considered. Facility contact provides this is pavement wash down water, 'item g' as referenced in the Permit. Additional information is to be added to the SWP3 clarifying the use of this wash water to support it as an authorized non-stormwater discharge.

Outfall 016 and 017 are included in a Stormwater Management Evaluation for dissolved zinc and Outfalls 011, 012, 016 and 030 for toxicity. A report is due each February with the last report received February 9, 2011.

| INSPECTION COMMENTS (continued): | |
|----------------------------------|---|
| | <p>Quarterly visual monitoring is performed and also well documented. There are several instances where the discharge is reported with poor qualities. Typical visual qualities included colored (gray/black and slight brown), and reported some discharges had turbidity. Many of these are attributed to plant decomposition though there were some reported issues with coal fines and fly ash. Nothing in the report provides for the evaluation of the current best management practices or if additional practices are needed to reduce or eliminate the pollutants from leaving the site.</p> <p>Odor was reported in several examinations; some reported to have a strong sulfur smell while others only reported a "slight odor" with no further explanation. The sulfur smell could be from naturally occurring sulfur compounds. When an odor is reported additional information concerning the type of odor encountered should be provided along with its potential source.</p> <p>Mr. Dickson provided that there is additional information included in the activity logs that will provide for corrective actions. It was suggested that a direct connection from the observations made and any of their eventual corrective actions applied be either referenced or included with the quarterly visual examination.</p> |
| | <p>Areas observed during the site survey included:</p> <ul style="list-style-type: none"> • Outfall 001 discharge channel • Metals cleaning waste pond • Coal Pile and coal pile runoff treatment pond • AST associated with Outfall 301 • Outfall 003, 011 and 012 • The screen wells for the cooling water intake • Chlorination building • Drainage areas around Outfalls 010, 016 and 017 • The perimeter road for the ash landfill • The oil waste pond, bottom ash pond and Outfall 002 area. • Outfall 018 areas <p>There were no problems observed throughout these areas with the roadway and major industrial areas that were observed being well managed. Considering the industrial activity, the site did appear to be very clean.</p> |
| | <p>Observations at Outfall 001 found a discolored area at the headwaters. Mr. Dickson provided that this change in color is likely from air bubbles that are coming to the surface of the tannin rich waters. Attached photographs do show this discolored area from the center of the channel following the land and concentrated near rocks at the shoreline. It was later found that a discharge was occurring from the demineralizer at the time of our observations. It is possible that the demineralizer discharge, containing very fine bubbles, created the discoloration. The start of the discolored water is in the vicinity of the discharge pipe for the demineralizer with the bubbles coming to the surface downstream. To verify this it is suggested that the discharge point be observed during demineralizer discharges to confirm that the discoloration is from the bubbles. This could be compared to the actual demineralizer discharge that is typically clear and colorless.</p> |
| | <p>The area around the truck wash facility near Outfall 016 was observed with some concerns for water discharging from this facility. Water in puddles was observed and there is some indication that water is running over the road and into the curb. The source of this water was not known nor was an actual discharge of water observed. This is not believed to be from rainfall with the last rain event occurring over six days ago. (Rainfall is documented on the 15th but occurred later in the night.) This must be reviewed during truck washing to determine if there is a potential for the process wastewater to discharge. If there is a potential for the loss of the process wastewater, steps are needed to ensure that this water is not discharged or the facility must apply for a modification of the permit to account for this discharge.</p> |

INSPECTION COMMENTS (continued):

The final area observed was for Outfall 018. Upon reviewing the permit, maps and the recent permit application it was noted that Outfall 018 show four different discharge points. The drainage area included for these discharges include the metals cleaning waste pond, the switch yard, parking lots, and open fields. These areas are considered industrially regulated with monitoring not required. The site map shows these areas discharging to "wetlands". The wetlands are then shown to flow to the east and out four culvert pipes to the discharge canal.

The actual discharges should be from the drainage discharges that go into the wetlands and should be shown as separate discharge points. The wetland discharge to the drainage ditch does not need to be noted as a discharge point. This will be addressed with the Permit writer and should be resolved with the issuance of the new Permit.

COMPLIANCE RECOMMENDATIONS FOR ACTION

Include all information as specified in the Permit under Part I.F.3.d for the representative sampling of Outfall 016 for Outfall 017.

Review the truck wash facility in the drainage area for Outfall 016 during washing operations and determine if there is a discharge of wastewater from this area. Eliminate any potential for discharge or apply for a permit modification.

UNIT PROCESS:

Industrial Pond
Metals Cleaning Waste Pond
Oily Waste Pond

| | | | | | | | | | | YES | NO | NA | |
|-----|--|-------------------------|----------|--------|-----------|--------|--------|-------------|--------|-----|----|----|---|
| 1. | Type of filters | Aerated | | | Polishing | | | Un-aerated | | √ | | | |
| 2. | Number of cells | one cell for both ponds | | | | | | | | | | | |
| 3. | Number cells in operation | one each | | | | | | | | | | | |
| 4. | Operation of system | | | | | | | | | | | | |
| | Series | √ | Parallel | | | | | Other: | | | | | |
| | Color | | | | | | | Light Brown | | | | | |
| 5. | Gray | Oily | Brown | | Green | Metals | Other: | | | | | | |
| | EVIDENCE OF THE FOLLOWING PROBLEMS: | | | | | | | | | | | | |
| | Vegetation in lagoon or dikes? | | | | | | | | | | | √ | |
| | Rodents burrowing on dikes? | | | | | | | | | | | √ | |
| | Erosion? | | | | | | | | | | | √ | |
| | Sludge bars? | | | | | | | | | | √ | | |
| | Excessive foam? | | | | | | | | | | | √ | |
| 6. | Floating material? | | | | | | | | | | | √ | |
| 7. | If aerated, are lagoon contents mixed adequately? | | | | | | | | | | | | √ |
| 8. | If aerated, is aeration system operating properly? | | | | | | | | | | | | √ |
| 9. | Odors: | Septic | | Earthy | | None | √ | Other: | | | | | |
| 10. | Fencing intact? | | | | | | | | | | √ | | |
| 11. | Grass maintained properly? | | | | | | | | | | √ | | |
| 12. | Level control valves working properly? | | | | | | | | | | | | √ |
| 13. | Effluent discharge elevation? | | | | Top | | Middle | √ | Bottom | √ | | | |
| 14. | Freeboard | | | | | | | | | | | | |
| 15. | Appearance of effluent? | | | | GOOD | √ | FAIR | | POOR | | | | |
| | Are monitoring wells present? | | | | | | | | | | | | |
| | Are wells adequately protected from runoff? | | | | | | | | | | | | |
| 16. | Are caps on and secured? | | | | | | | | | | | | |

GENERAL CONDITION:

GOOD

√

FAIR

POOR

COMMENTS:

Both of these ponds are lined. Solids (sludge bar) was observed in the oily waste pond near the

UNIT PROCESS

EFFLUENT/PLANT OUTFALL

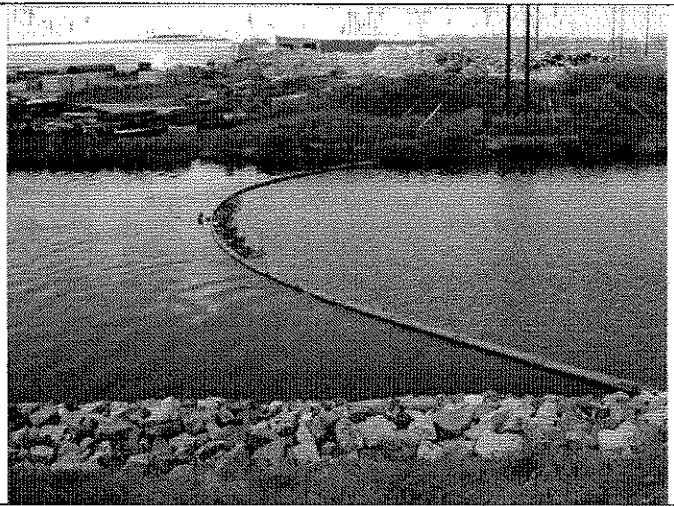
| | | | | | | | | YES | NO | NA |
|--|-------------------------|-------------|----------|---|-----------|---|------|-----|----|----|
| 1. | Type of outfall | Shore Based | | √ | Submerged | | √ | | | |
| TYPE IF SHORE BASED: | | | | | | | | | | |
| 2. | Wingwall | | Headwall | √ | Rip Rap | √ | Pipe | √ | | |
| 3. | Flapper valve present? | | | | | | | | √ | |
| 4. | Erosion of bank area? | | | | | | | | √ | |
| 5. | Effluent plume visible? | | | | | | | | √ | |
| Condition of outfall and the supporting structure? | | | | | | | | | | |
| 6. | GOOD | √ | FAIR | | POOR | | | | | |
| FINAL EFFLUENT, EVIDENCE OF FOLLOWING PROBLEMS? | | | | | | | | | | |
| Oil sheen? | | | | | | | | | √ | |
| Grease? | | | | | | | | | √ | |
| Sludge bar? | | | | | | | | | √ | |
| Turbid effluent? | | | | | | | | | √ | |
| Visible foam? | | | | | | | | | * | |
| 7. | Unusual color? | | | | | | | | √ | |

| | | | | | | |
|--------------------|------|---|------|--|------|--|
| GENERAL CONDITION: | GOOD | √ | FAIR | | POOR | |
|--------------------|------|---|------|--|------|--|

| | |
|-----------|---|
| COMMENTS: | Outfalls 001, 002, 003, 010, 016, 017, and 018 were observed without a specific issue. Foam was observed in the headwaters of Outfall 001 but was not discharged at the end of the canal. Outfall 016 needs to be checked for discharges when truck washing is occurring. |
|-----------|---|



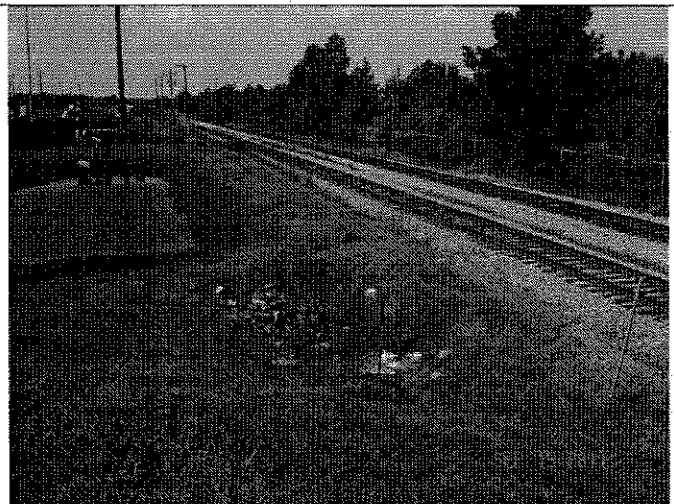
1) Headwaters of Outfall 001. Discolored water can be seen from the middle of the canal to the rocks. This could be from the discharge from Outfall 101 and bubbles resulting from the demineralizer discharge.



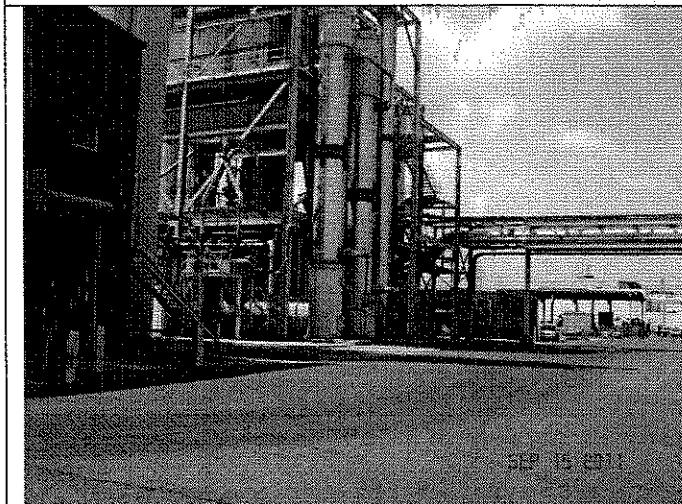
2) Outfall 001 canal and boom to capture debris.



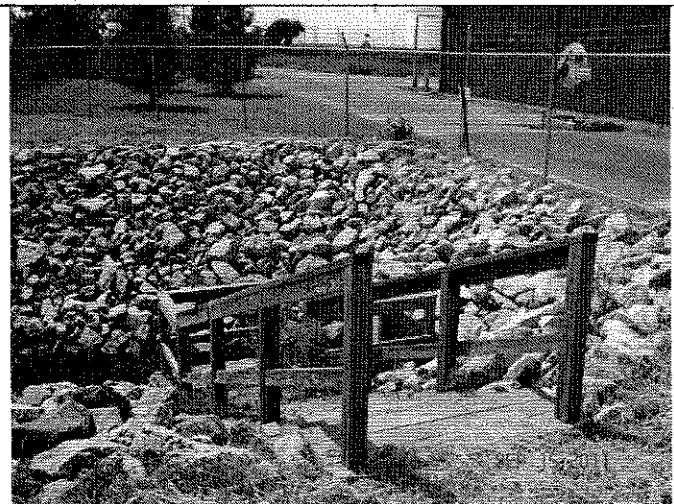
3) Coal pile runoff pond with pond entrance in the foreground. Curbing is in place to capture some of the solids.



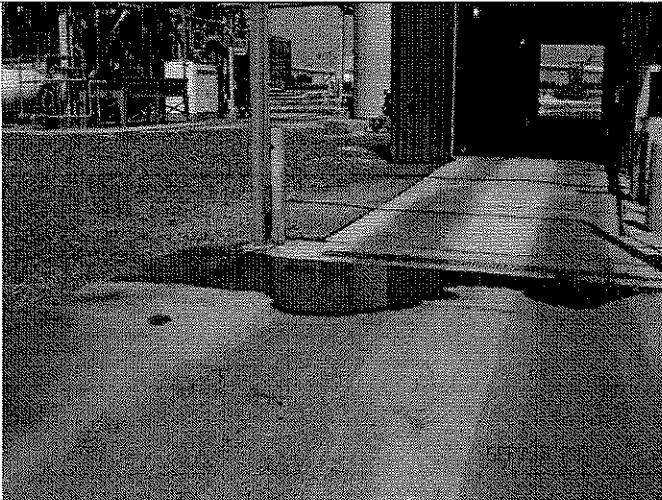
4) Discharge point for the coal pile treatment pond. This discharges to Outfall 003.



5) Outfall 016 drainage area with the carbon burning facility and the truck wash in the blue building.



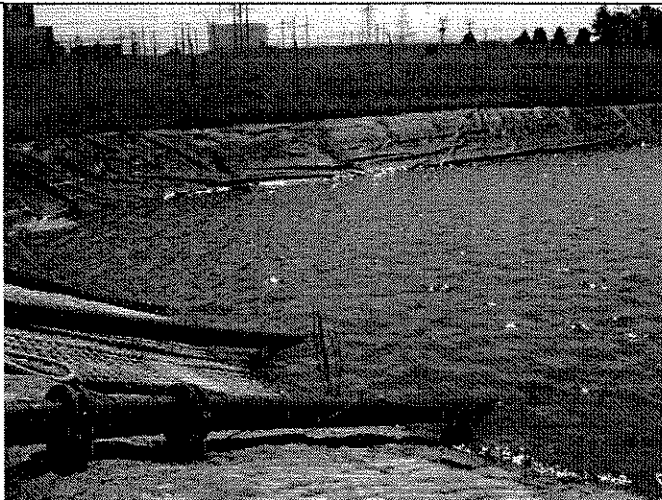
6) Outfall 016 access point.



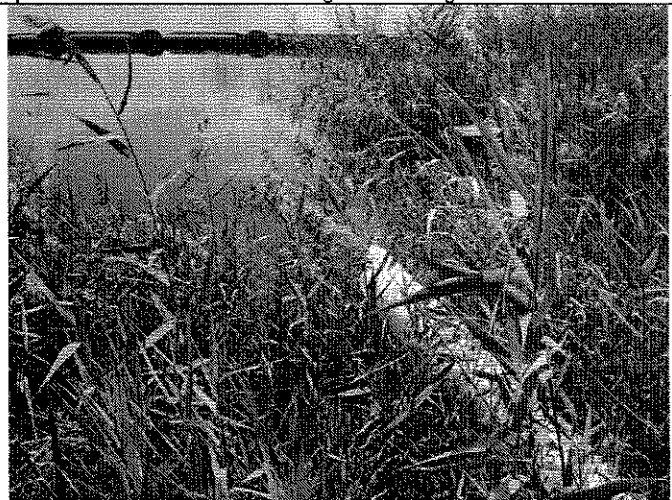
7) Truck washing site with pooled water outside of the containment area.



8) Wet area from the truck wash does provide some indication of loss of the process water to the roadway. This is in the area of Outfall 016 which is a 'stormwater-only' discharge. This should be reviewed during operations to determine if a discharge is occurring.



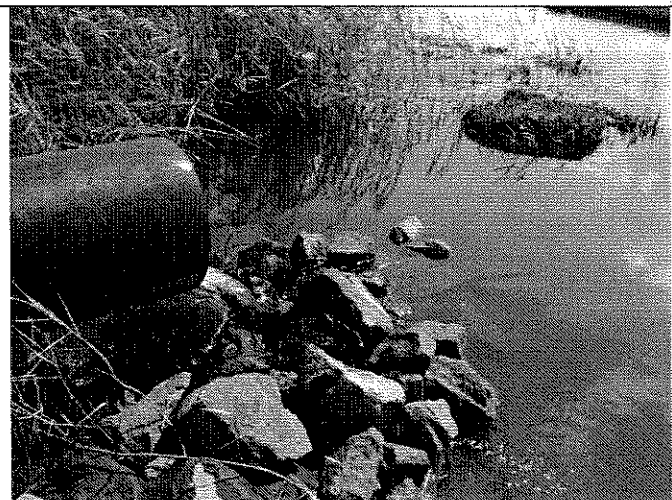
9) Metals cleaning pond near the entrance of the facility.



10) Discharge pipe for the metals cleaning pond at bottom ash pond.



11) Oily waste pond for Outfall 002. Majority of this flow is from the center of the site near the generation building. A "sludge bar" of solids was observed at the entrance pipe to this pond.



12) Discharge from the oily waste pond. Observed to be clear and colorless.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

(757) 518-2000 Fax (757) 518-2009

www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Francis L. Daniel
Regional Director

November 1, 2011

Paul E. Dickson – Environmental Supervisor
Dominion – Chesapeake Energy Center
2701 Vepco Rd.
Chesapeake, VA 23323

Re: Laboratory Inspection
Chesapeake Energy Center (VA0004081)

Dear Mr. Dickson:

Enclosed is a copy of the inspection report for the laboratory records review associated with the site visit on September 15, 2011. Please note that the Laboratory Evaluation Section of the report identifies that the Laboratory Records Section requires correction. The report identifies the specific deficiencies and makes recommendations for corrective measures. The General Sampling and Analysis section further identifies an issue with sampling procedures for one of the internal Outfalls. Though this item is not considered a deficiency, it is addressed in this report.

In view of the significance attached to proper sampling and analysis of samples for use in complying with the terms of your VPDES/VPA permit, please review the attached report and make the appropriate corrections to ensure permit compliance. To avoid possible enforcement action, within twenty (20) days of receipt of this letter send a written notification to this office of the corrective measures that you have implemented. If you have not taken corrective action and/or responded to this office in writing by the above deadline, this matter will be referred to the Regional Compliance Auditor and a Warning Letter (WL) may be issued.

This letter is not intended as a case decision under the Virginia Administrative Process Act, Va. Code § 2.2-4000 *et seq.* If you have any questions regarding this report, please contact me or Mr. Kenneth T. Raum at the above address or telephone (757) 518-2000.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Long".

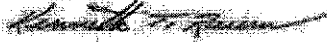
Steven J.E. Long
Environmental Specialist II

Enclosure

cc: DEQ/OWCP: S.G. Stell
DEQ/TRO: File

**DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
LABORATORY INSPECTION REPORT**

10/01

| | | | | |
|--|------------------------------------|--|--|--|
| FACILITY NO: VA004081 | INSPECTION DATE: 9/15/11 | PREVIOUS INSP. DATE: 3/25/10 | PREVIOUS EVALUATION: No deficiencies | TIME SPENT: 10 hours |
| NAME/ADDRESS OF FACILITY: Dominion – Chesapeake Energy Center 2701 Vepco Rd. Chesapeake, VA 23323 | | FACILITY CLASS: (√) MAJOR | FACILITY TYPE: () MUNICIPAL | UNANNOUNCED INSPECTION? (√) YES () NO |
| | | () MINOR | (√) INDUSTRIAL | |
| | | () SMALL | () FEDERAL | FY-SCHEDULED INSPECTION? (√) YES () NO |
| | | () HIGH PRIORITY | () VPA/NDC | |
| | | () LOW PRIORITY | () COMMERCIAL LAB | |
| INSPECTOR(S): Steven J.E. Long | | REVIEWERS:  Kenneth T. Raum / 10-21-11 | | PRESENT AT INSPECTION: Paul Dickson – Environmental Supervisor |
| LABORATORY EVALUATION | | | | DEFICIENCIES? |
| | | | | Yes |
| | | | | No |
| LABORATORY RECORDS | | | | X |
| GENERAL SAMPLING & ANALYSIS | | | | * |
| | | | | |
| | | | | |
| This report is based on a records review only for those records associated with the site visit performed September 15, 2011. | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| QUALITY ASSURANCE/QUALITY CONTROL | | | | |
| Y/N | QUALITY ASSURANCE METHOD | PARAMETERS | | FREQUENCY |
| | REPLICATE SAMPLES | | | |
| | SPIKED SAMPLES | | | |
| | STANDARD SAMPLES | | | |
| | SPLIT SAMPLES | | | |
| | SAMPLE BLANKS | | | |
| | OTHER | | | |
| | EPA-DMR QA DATA? | RATING: () No Deficiency () Deficiency (X) NA | | |
| | QC SAMPLES PROVIDED? | RATING: () No Deficiency () Deficiency (X) NA | | |
| COPIES TO: (x) DEQ - RO; (x) OWCP; () VDH-DWE; (x) OWNER; () EPA-Region III; () Other: | | | | |

LABORATORY RECORDS SECTION

LABORATORY RECORDS INCLUDE THE FOLLOWING:

| | | | | | |
|-------------------------------------|-----------------|-------------------------------------|---------------|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | SAMPLING DATE | <input checked="" type="checkbox"/> | ANALYSIS DATE | <input type="checkbox"/> | CONT MONITORING CHART |
| <input checked="" type="checkbox"/> | SAMPLING TIME | <input checked="" type="checkbox"/> | ANALYSIS TIME | <input checked="" type="checkbox"/> | INSTRUMENT CALIBRATION |
| <input checked="" type="checkbox"/> | SAMPLE LOCATION | <input checked="" type="checkbox"/> | TEST METHOD | <input checked="" type="checkbox"/> | INSTRUMENT MAINTENANCE |
| | | | | <input checked="" type="checkbox"/> | CERTIFICATE OF ANALYSIS |

WRITTEN INSTRUCTIONS INCLUDE THE FOLLOWING:

| | | | | | |
|--------------------------|--------------------|--------------------------|--------------|--------------------------|---------------------|
| <input type="checkbox"/> | SAMPLING SCHEDULES | <input type="checkbox"/> | CALCULATIONS | <input type="checkbox"/> | ANALYSIS PROCEDURES |
|--------------------------|--------------------|--------------------------|--------------|--------------------------|---------------------|

| | YES | NO | N/A |
|---|-----|----|-----|
| DO ALL ANALYSTS INITIAL THEIR WORK? | | | √ |
| DO BENCH SHEETS INCLUDE ALL INFORMATION NECESSARY TO DETERMINE RESULTS? | | | √ |
| IS THE DMR COMPLETE AND CORRECT? MONTH(S) REVIEWED: See comments below. | | X | |
| ARE ALL MONITORING VALUES REQUIRED BY THE PERMIT REPORTED? | | X | |

GENERAL SAMPLING AND ANALYSIS SECTION

| | YES | NO | N/A |
|---|-----|----|-----|
| ARE SAMPLE LOCATION(S) ACCORDING TO PERMIT REQUIREMENTS? | √ | | |
| ARE SAMPLE COLLECTION PROCEDURES APPROPRIATE? | √* | | |
| IS SAMPLE EQUIPMENT CONDITION ADEQUATE? | | | √ |
| IS FLOW MEASUREMENT ACCORDING TO PERMIT REQUIREMENTS? | √ | | |
| ARE COMPOSITE SAMPLES REPRESENTATIVE OF FLOW? | | | √ |
| ARE SAMPLE HOLDING TIMES AND PRESERVATION ADEQUATE? | √* | | |
| IF ANALYSIS IS PERFORMED AT ANOTHER LOCATION, ARE SHIPPING PROCEDURES ADEQUATE? LIST PARAMETERS AND NAME & ADDRESS OF LAB: Dominion Central Laboratory; Universal Laboratories | √ | | |

LABORATORY EQUIPMENT SECTION

| | YES | NO | N/A |
|--|-----|----|-----|
| IS LABORATORY EQUIPMENT IN PROPER OPERATING RANGE? | | | √ |
| ARE ANNUAL THERMOMETER CALIBRATION(S) ADEQUATE? | | | √ |
| IS THE LABORATORY GRADE WATER SUPPLY ADEQUATE? | | | √ |
| ARE ANALYTICAL BALANCE(S) ADEQUATE? | | | √ |

FOR ASTERISK ITEMS (*) SEE LABORATORY INSPECTION REPORT SUMMARY PAGES FOR DETAILS.

**DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
LABORATORY INSPECTION REPORT SUMMARY**

10/01

| | | | | | |
|----------------|--|-----------|------------------|-------------|----------------|
| FACILITY NAME: | Dominion – Chesapeake Energy Center | VPDES NO: | VA0004081 | INSP. DATE: | 9/15/11 |
|----------------|--|-----------|------------------|-------------|----------------|

LABORATORY RATING

NO DEFICIENCIES

X

DEFICIENCIES

LABORATORY RECORDS

Records reviewed: pH, calibration, Chlorine calibration, Technicians demonstration of initial competency, and the following monitoring periods and Discharge Monitoring Report :

November 2010 – Outfall 201

January 2011 – Outfalls 001, 002, and 206

1st Quarter 2011 – Outfalls 101, 301, 016 and 017.

1st Semi-annual 2011 – Outfalls 003, 010, 030, and 031

The Laboratory Records section has the following deficiencies:

- The Quantification Limit (QL) for TSS is defined in the Permit at 1.0 mg/L (Page 20, Part I.D.5.a). Part I.D.6.a provides that If all data are below the QL, then the average shall be reported as <QL. Part I.D.6.c states that "Any single datum required shall be reported as <QL if it is less than the QL listed in Part I.D.5.a.". Outfall 101 for the 1st quarter 2011 shows a result of <1.0 mg/L versus <QL.
- Dissolved zinc for Outfall 003 for the 1st semi-annual monitoring is reported as 46 ug/L. This parameter has a defined quantification limit of 50 ug/L. The correct reporting should be <QL.
- The TPH for Outfall 003 for the 1st semi-annual monitoring is NOT reported. Results were observed in the analytical data. This appears to be an omission. This has been reviewed with correction pending resolution of the TPH reporting noted below.
- TPH reporting when two fractions (DRO and GRO) are reported as "less than" should be reported as < the total of the two quantification limits. For the records reviewed both fractions were reported as <0.5 mg/L; the correct value should be reported as <1.0 mg/L. This issue was observed for several reports. Information for reporting the TPH was provided and is under review by facility personnel and considered resolved pending that review.
- Dissolved metals filtration not indicated on the reported on the Chemical Analysis Order for Outfall 003 sampled on 1/18/11. Dissolved metals filtration is reported for Outfall 011 but a time is not given. This issue has been resolved noting that the sampling procedure includes inline filtration of the sample upon its collection. This is to be included on the order sheet or the chain of custody to eliminate questions of this nature.

Corrective Actions: The following items have been discussed and resolved:

Properly report all parameters adhering to correct reporting criteria for those parameters with defined quantification limits. For those parameters that do not have defined quantification limits, report "less than" and the actual numerical value of the quantification limit as reported by the laboratory. Report the TPH parameter using the convention as provided via email. Include information as discussed for the field filtration of the dissolved metals.

The only item needing further resolution is submission of the corrected Discharge Monitoring Report for Outfall 003 that includes the TPH results.

GENERAL SAMPLING AND ANALYSIS

The General Sampling and Analysis section has the following item for sampling (Not considered a deficiency):

Outfall 201 is a grab sample of the metals cleaning basin. The Permit provides that sample shall be collected at the tap in the recirculation line at the pond. The Permit further states that "No wastewater shall be added to the basin after sample is collected prior to discharge for the sample period".

Current operating procedures provide for the sampling and the analysis of the pond at the tap with the discharge pending the results of this re-circulated pond water. Once the results are obtained and found to be within the Permit limits, a discharge is initiated and the results from the recirculation line are reported. An actual discharge sample is not taken.

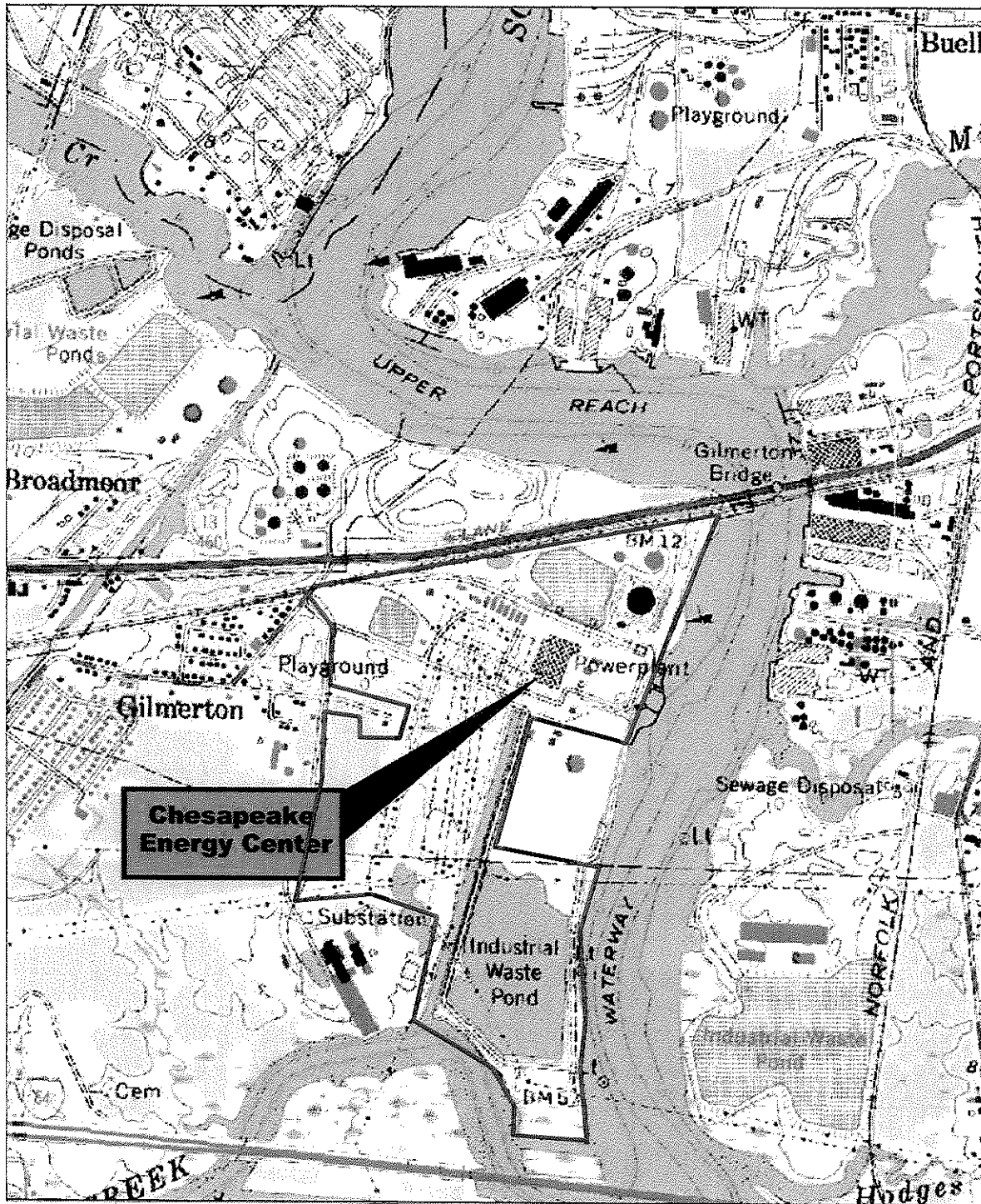
The last discharge from this pond was in November 2010. Original sampling was performed on 10/29/10 with a comment noting that "These will be used for discharging in November". Results obtained for the October sampling showed the iron results at 1.4 mg/L, which is above the 1.0 mg/L Permit limit. Comments were observed indicating the need for further treatment for lowering the iron. Treatment does include addition of calcium hydroxide with recirculation of the pond water. Samples were then taken 11/16/10 with all parameters below the Permit limits and a discharge was stated at 0836 on 11/24/11.

Several concerns for the current sampling methodology and reporting are found. The samples obtained are representative of the pond conditions at the time of sampling. These results are not necessarily representative of the discharge occurring several days later. With some parameters dependent on temperature and pH, there could be significant differences from the time of the sampling to the time of the discharge. As currently written, though not operated in this manner, the facility could discharge months after the sampling event as long as no further wastewater is added to the basin.

Discussing this with both facility and agency personnel, nothing was provided that a comparison study was conducted to verify there was no difference. This issue was originally brought to the Permit writer's attention and will be addressed in the issuance of the new permit.

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP



ENSR | AECOM

ENSR CORPORATION
 4701 COX ROAD, SUITE 200
 GLEN ALLEN, VA 23060
 PHONE: (804) 290-2493
 FAX: (804) 290-7921
 WEB: [HTTP://WWW.ENSR.AECOM.COM](http://www.ensr.aecom.com)

QUADRANGLE:
 NORFOLK SOUTH

NOT TO SCALE

SITE LOCATION MAP
 CHESAPEAKE ENERGY CENTER
 CHESAPEAKE, VIRGINIA

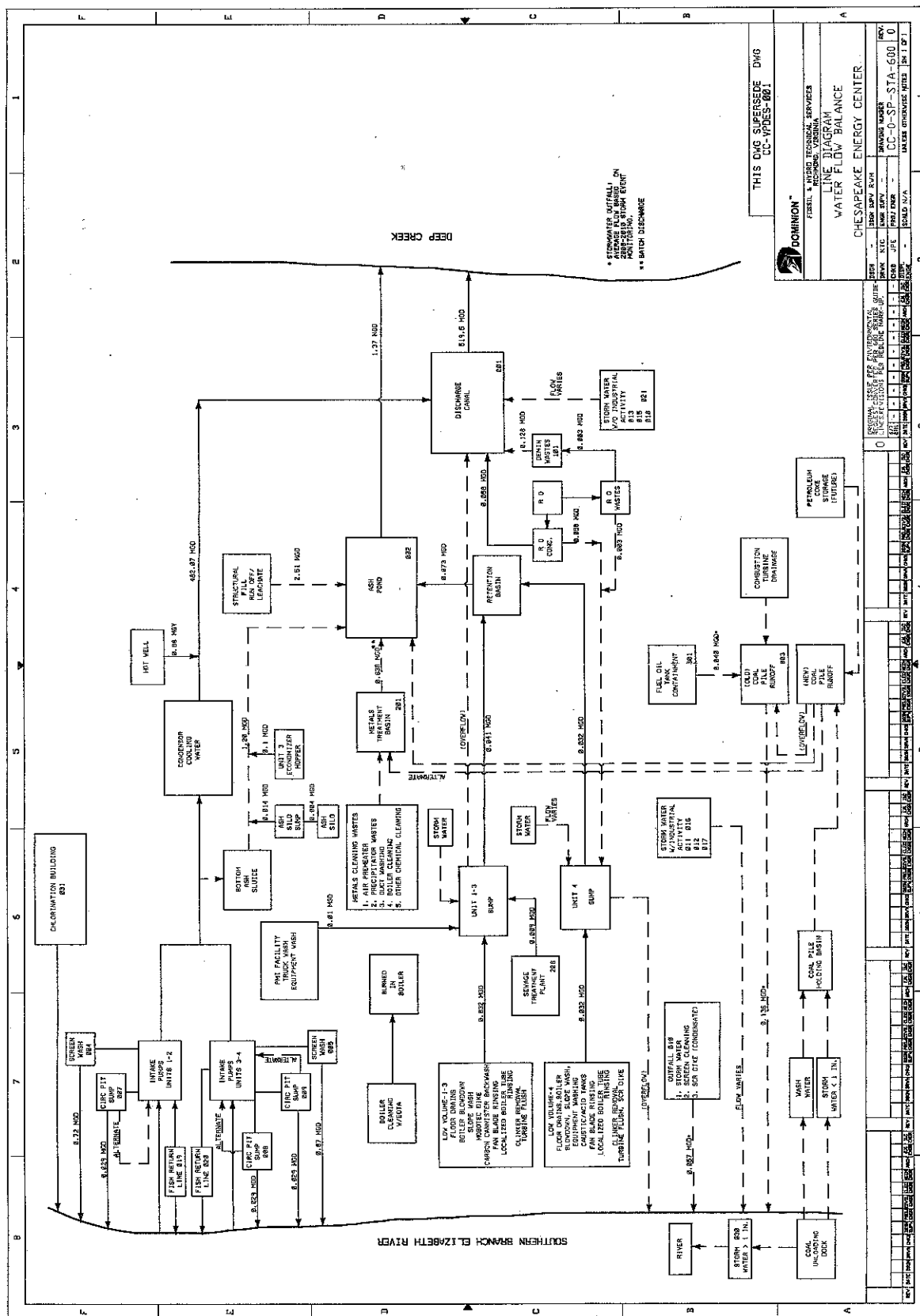

FIGURE NUMBER:

1

| DRAWN BY: | DATE: | PROJECT NUMBER: | DRAWING NUMBER: |
|-----------|---------|-----------------|-----------------|
| LLM | 6/15/07 | 02285-038 | 1 of 1 |

ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/
WATER BALANCE

DWG SUPERSEDE DWG
CC-VPDES-001 DOMINION™

FUESSIL & HYDRO TECHNICAL SERVICES
RICHMOND, VIRGINIA

LINE DIAGRAM

WATER FLOW BALANCE
THE SPEAKE ENERGY CENTER

| | | | |
|-------------|----------|----|-----|
| DATE | 11/11/11 | BY | HAZ |
| TIME | 11:11 | BY | HAZ |
| LOCATION | HAZ | | |
| DESCRIPTION | HAZ | | |
| REMARKS | HAZ | | |
| SIGNATURE | HAZ | | |
| DATE | HAZ | | |

| | | | |
|----------|-----------------|------|---|
| DRWG NO. | CC-0-SP-STA-600 | REV. | 0 |
| ENGR | PROJ ENGR | | |

| SCALE: N/A | UNLESS OTHERWISE NOTED | SH 1 OF 1 |
|------------|------------------------|-----------|
|------------|------------------------|-----------|

2025 RELEASE UNDER E.O. 14176

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

TABLE I

NUMBER AND DESCRIPTION OF OUTFALLS

| OUTFALL NO. | DISCHARGE LOCATION | DISCHARGE SOURCE (1) | TREATMENT (2) (See attached) | FLOW (3 and 4) |
|-------------|-------------------------|--|---------------------------------|----------------|
| 001 | 36°45'45" 76°18'15" | Discharge Canal which includes: Once through cooling water condenser, Units 1-4; Demineralized wastes (101); reverse osmosis concentrate; stormwater outfalls 013, 015, 018, 021; Hotwell dumps | | 519.5 MGD |
| 101 | Internal Outfall to 001 | Demineralizer wastes and reverse osmosis waste to 001 | | 0.128 MGD |
| 002 | 36°45'45" 76°18'15" | Ash pond; metals treatment basin (201); sewage treatment plant (206); low volume wastes from Units 1-3 including floor drains, boiler blowdown, slope wash, Mobotec dike drainage; Carbon canister backwash, fan blade rinsing, localized boiler tube rinsing, boiler clinker removal, turbine flush water; low volume waste Unit 4 including floor drains, boiler blowdown, slope wash, equipment washing, caustic/acid tank dikes, fan blade rinsing, localized boiler tube rinsing, boiler clinker removal, turbine wash water, SCR dike; bottom ash sluice; Unit 3 economizer hopper; structural fill run off/leachate; ash silo sump including truck wash and PMI facility; coal pile runoff; and reverse osmosis concentrate | | 1.37 MGD |

| OUTFALL NO. | DISCHARGE LOCATION | DISCHARGE SOURCE (1) | TREATMENT (2) (See attached) | FLOW (3 and 4) |
|-------------|-------------------------|---|---------------------------------|-----------------------------------|
| 201 | Internal Outfall to 002 | Metals treatment basin (cleaning wastes including air preheater wash water, precipitator wash water, duct wash water, chemical boiler cleaning, other chemical cleaning | | Batch Discharge |
| 206 | Internal Outfall to 002 | Sewage Treatment Plant | | 0.009 MGD |
| 004 | 36°46'15" 76°18'0" | Screen backwash units 1&2 | | 0.72 MGD |
| 005 | 36°46'15" 76°18'0" | Screen backwash units 3&4 | | 0.87 MGD |
| 007 | 36°46'15" 76°18'0" | River recirculation pit sump units 1&2 | | 0.029 MGD |
| 008 | 36°46'15" 76°18'0" | River recirculation pit sump unit 3 | | 0.029 MGD |
| 009 | 36°46'15" 76°18'0" | River recirculation pit sump units 4 | | 0.029 MGD |
| 019 | 36°46'15" 76°18'0" | Fish return line units 1&2 | | Varies |
| 020 | 36°46'15" 76°18'0" | Fish return line units 3&4 | | Varies |
| 031 | 36°46'15" 76°18'0" | Chlorination building (uncontaminated river water) | | Drain plugged, has not discharged |
| 003 | 36°46'30" 76°18'0" | Coal pile runoff, bermed bulk fuel oil storage area runoff (301), combustion turbine area runoff, synfuel wash water runoff overflow, coal dock storm water and wash water overflow | | 0.062 MGD |

| OUTFALL NO. | DISCHARGE LOCATION | DISCHARGE SOURCE (1) | TREATMENT (2) (See attached) | FLOW (3 and 4) |
|----------------|------------------------|---|------------------------------------|---|
| 301 | 36°46'30" 76°18'0" | Storm water from bermed bulk fuel oil storage area | | 0.002 MGD valved and batch discharge |
| 010 | 36°46'15" 76°18'0" | Storm water from ash silos areas and truck wash | | 0.011 MGD |
| 011 | 36°46'30" 76°17'30" | Storm water from loop (rail) track area that includes construction maintenance laydown area (steel fabrication, portable diesel and gasoline storage, equipment storage, lime staging, south oil storage tank and material/ equipment/laydown) | | 0.010 MGD valved and batch discharge |
| 012 | 36°46'30" 76°18'0" | Storm water runoff from dismantled diesel tank diked area and loop track area | | 0.008 MGD Valved and batch discharge |
| 013 | 36°46'0" 76°18'15" | Storm water runoff from small area adjacent to the natural gas storage facility and haul road | | 0.001 MGD |
| 015 | 36°46'15" 76°18'15" | Storm water runoff from drainage area adjacent to and including the training center | | 0.001 MGD |
| 016 | 36°46'15" 76°18'0" | Storm water runoff from road providing ingress and egress for the ash silos, warehouse docks, sewage treatment building, ash haul road and scales, a laydown area, carbon burn out operations (CBO) | | 0.004 MGD |
| 017 | 36°45'57" 76°18'0" | Storm water runoff from portion of the warehouse roof, storage yard and ash haul road with possible groundwater associated | | 0.005 |

| OUTFALL NO. | DISCHARGE LOCATION | DISCHARGE SOURCE (1) | TREATMENT (2) (See attached) | FLOW (3 and 4) |
|----------------|------------------------|---|------------------------------------|---|
| 018 | 36°46'0" 76°18'15" | Storm water runoff from the station and visitor parking areas, a substation adjacent to the visitor parking area, pavilion area, undeveloped area west of discharge canal, and east southeast area of the metals pond | | 0.083 MGD |
| 021 | 36°46'15" 76°18'15" | Storm water runoff from drainage area adjacent to, and including the front of the administration building | | 0.002 MGD |
| 030 | 36°45'45" 76°18'15" | Storm water runoff from the coal unloading dock | | 0.001 MGD Currently all water goes to the coal pile treatment pond there has been no discharge |
| | | | | |

- (1) List operations contributing to flow
(2) Give brief description, unit by unit
(3) Give maximum 30-day average flow for industry - provided for in application
(4) Storm water flow estimates calculated using 0.011 ft average rainfall values, 0.9 runoff coefficient for impervious surfaces and 0.6 runoff coefficient for pervious surfaces.

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 001

Outfall Description: Once through condenser cooling water; demineralizer regeneration waste and reverse osmosis waste water (101); units 1-3 sump overflow; hotwell dumps

SIC CODE: 4911

(x) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|--|------------------|--------------------------|----------------------|---------|---------|-------------------------|-------------|
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | 3 | | NL | NA | NL | 1/Day | Est |
| pH (S.U.) | 3 | | NA | 6.0 | 9.0 | 2/Month | Grab |
| Total Residual Chlorine (mg/l) [a] [b] | 2 | | .021 | NA | .026 | 2/Month | Grab |
| Total Phosphorus (mg/l) | 3 | | 2.0 | NA | NA | 2/Month | Grab |
| Total Nitrogen (mg/l) | 3 | | NL | NA | NA | 2/Month | Grab |
| Temperature (°C) | 2 | | NA | NA | [c] | 1/Year | [c] |
| Heat Rejection (BTU/HR) | 3 | | 3.55 x 10 (9) | NA | NA | Continuous | Record ed |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/Year = Between January 1 and December 31.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Parts I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

[b] See Part I.D.15. for Total Residual Discharge Duration.

[c] See Part I.D.14 for Thermal Mixing Zone Requirements.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 101 (internal outfall to 001)

Outfall Description: Demineralizer regeneration wastes and reverse osmosis wastes

SIC CODE: 4911

| (x) Final Limits () Interim Limits | | Effective Dates - | | From: Issuance | | To: Expiration | |
|-------------------------------------|------------------|--------------------------|----------------------|----------------|---------|-------------------------|-------------|
| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | 3 | | NL | NA | NL | 1/3 Months | Est |
| Oil & Grease (mg/l) | 1 | | 15 | NA | 20 | 1/3 Months | Grab |
| Total Suspended Solids (mg/l) | 1 | | 30 | NA | 100 | 1/3 Months | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 002

Outfall Description: Ash pond; metals treatment basin (201); sewage treatment plant (206); low volume wastes Units 1-3; low volume waste Unit 4; bottom ash sluice; Unit 3 economizer hopper; structural fill run off/leachate; ash silo sump including truck wash, PMI facility; coal pile/dock runoff; reverse osmosis concentrate

SIC CODE: 4911

| (x) Final Limits () Interim Limits | | | Effective Dates - | | From: Issuance | | To: Expiration | |
|-------------------------------------|------------------|--------------------------|----------------------|---------|----------------|-------------------------|----------------|--|
| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | | |
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE | |
| Flow (MGD) | 3 | | NL | NA | NL | 2/Month | Est | |
| pH (S.U.) | 3 | | NA | 6.0 | 9.0 | 2/Month | Grab | |
| Total Residual Chlorine (mg/l) [a] | 2 | | .026 | NA | .026 | 1/3 Months | Grab | |
| Total Phosphorus (mg/l) | 3 | | 2.0 | NA | NA | 2/Month | Grab | |
| Total Nitrogen (mg/l) | 3 | | NL | NA | NA | 2/Month | Grab | |
| Oil & Grease (mg/l) | 1 | | 15 | NA | 20 | 2/Month | Grab | |
| Total Suspended Solids (mg/l) | 1 | | 30 | NA | 50 | 2/Month | Grab | |
| Ammonia (mg/l) [a] | 3 | | NL | NA | NL | 2/Month | Grab | |
| Dissolved Copper (ug/l) [a] [b] | 3 | | NA | NA | NL | 1/6 Months | Grab | |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30); 2nd half (July 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Parts I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

[b] See Part I.B. for Boiler Cleaning/Metals Requirements.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 201

Outfall Description: Metals treatment basin

SIC CODE: 4911

(x) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS [a] | |
|-------------------------------|------------------|--------------------------|----------------------|---------|---------|-----------------------------|-------------|
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | 3 | | NL | NA | NL | 1/Month | Est |
| Total Suspended Solids (mg/l) | 1 | | 30 | NA | 100 | 1/Month | Grab |
| Oil & Grease (mg/l) | 1 | | 15 | NA | 20 | 1/Month | Grab |
| Total Copper (mg/l) | 1 | | 1 | NA | 1 | 1/Month | Grab |
| Total Iron (mg/l) | 1 | | 1 | NA | 1 | 1/Month | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

[a] Unless otherwise approved, the sample shall be collected at the tap in the recirculation line. No wastewater shall be added to the basin after sample is collected prior to discharge for the sample period (sample period is 30 days).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 206

Outfall Description: Sewage treatment plantSIC CODE: 4911

(x) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|------------------------------------|------------------|--------------------------|----------------------|---------|---------|-------------------------|-------------|
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | 3 | | NA | NA | NL | 1/Month | Est |
| Total Residual Chlorine (mg/l) [a] | 3 | | NA | 1.5 | NA | 1/Month | Grab |
| Enterococci (N/100ml) [a] | 3 | | NA | NA | NL | 1/Month | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.C. for Alternative Disinfection and Enterococci Monitoring.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 003

Outfall Description: Regulated storm water from coal pile runoff, bermed bulk storage fuel area runoff (301), combustion turbine area runoff, synfuel wash water runoff overflow, coal dock storm water and wash water overflow

SIC CODE: 4911

| (x) Final Limits () Interim Limits | | Effective Dates - | | From: Issuance | | To: Expiration | |
|-------------------------------------|------------------|--------------------------|----------------------|----------------|---------|-----------------------------|-----------------|
| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS [a] | |
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE [b] |
| Flow (MGD) | 3 | | NA | NA | NL | 1/6 Months | Est |
| pH (S.U.) | 1 | | NA | 6.0 | 9.0 | 1/6 Months | Grab |
| TSS (mg/l) [c] | 1 | | NA | NA | 50 | 1/6 Months | Grab |
| TPH (mg/l) [d] [e] | 3 | | NA | NA | NL | 1/6 Months | Grab |
| Dissolved Copper (ug/l) [d] | 3 | | NA | NA | NL | 1/6 Months | Grab |
| Dissolved Zinc (ug/l) [d] | 3 | | NA | NA | NL | 1/6 Months | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30); 2nd half (July 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.F.1. for sampling methodology and reporting requirements.

[b] The grab sample shall be taken within the first hour but not later than 24 hours of the start of a discharge.

[c] See Part I.D.12. for overflow of untreated coal pile runoff from a 10-Year/24-Hour Storm.

[d] See Parts I.D.5. and I.D. 6. For quantification levels and reporting requirements.

[e] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 301

Outfall Description: Storm water from bermed bulk oil storage area

SIC CODE: 4911

| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|--------------------|------------------|--------------------------|----------------------|---------|---------|-------------------------|-------------|
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| Flow (MG) | 3 | | NL | NA | NL | 1/3 Months | Grab |
| TPH (mg/l) [a] [b] | 3 | | NA | NA | 30 | 1/3 Months | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Parts I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

[b] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

No discharge of tank bottom waters.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 004 and 005 (screen backwash units); 007, 008, and 009 (river recirculation pits); 019 and 020 (fish return lines)

Outfall Description: Discharge of unaltered waters as they are drawn from the source supply
 SIC CODE: 4911

| | | | | |
|------------------|--------------------|-------------------|----------------|----------------|
| (x) Final Limits | () Interim Limits | Effective Dates - | From: Issuance | To: Expiration |
|------------------|--------------------|-------------------|----------------|----------------|

THESE DISCHARGES SHALL ONLY CONTAIN RIVER WATER FROM THE SCREEN BACKWASH UNITS, RIVER RECIRCULATION PITS AND FISH RETURN LINES. NO PROCESS WATER SHALL BE DISCHARGED FROM THESE OUTFALLS. NO MONITORING IS REQUIRED

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 010

Outfall Description: Storm water from areas surrounding ash silos and truck wash

SIC CODE: 4911

(x) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS [a] | |
|------------------------------|------------------|--------------------------|----------------------|---------|---------|-----------------------------|-----------------|
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE [d] |
| Flow (MG) | 3 | | NA | NA | NL | 1/6 Months | Est [c] |
| pH (S.U.) | 3 | | NA | NL | NL | 1/6 Months | Grab |
| TSS (mg/l) [b] | 3 | | NA | NA | NL | 1/6 Months | Grab |
| TPH (mg/l) [b] [e] | 3 | | NA | NA | NL | 1/6 Months | Grab |
| Dissolved Copper (ug/l) [b] | 3 | | NA | NA | NL | 1/Year | Grab |
| Dissolved Arsenic (ug/l) [b] | 3 | | NA | NA | NL | 1/Year | Grab |
| Dissolved Lead (ug/l) [b] | 3 | | NA | NA | NL | 1/Year | Grab |
| Dissolved Zinc (ug/l) [b] | 3 | | NA | NA | NL | 1/Year | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30); 2nd half (July 1 - December 31).

1/Year = Between January 1 and December 31.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.D.9.

[b] See Part I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

[c] Estimate of the total volume of the discharge during the storm event.

[d] The grab samples shall be taken within the first hour but not later than 24 hours of the discharge.

[e] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 011 and 012

Outfall Description: Regulated storm water runoff from industrial activity areas including the loop track area and fuel oil storage area

SIC CODE: 4911

NOTE: These outfalls represent storm event monitoring for existing process and/or non-process outfalls.

| PARAMETER & UNITS | STORM CATEGORY 1-29* or BPJ | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS [a] | |
|--------------------------------|--------------------------------------|--------------------------|---------|--------------------------------|-----------------------|
| | | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE [c] |
| Flow (MG) | 14 | NA | NL | 1/Year | Estimate [b] |
| pH (S.U.) | 14 | NL | NL | 1/Year | Grab |
| TSS (mg/l) [d] | 14 | NA | NL | 1/Year | Grab |
| TPH (mg/l) [d][e] | BPJ | NA | NL | 1/Year | Grab |
| Dissolved Copper (ug/l) [d] | 14 | NA | NL | 1/Year | Grab |
| Dissolved Zinc (ug/l) [d] | 14 | NA | NL | 1/Year | Grab |

1/Year = Between January 1 and December 31.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit, regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.F.1. for sampling methodology and reporting requirements.

[b] Estimate of the total volume of the discharge during the storm event.

[c] The grab sample shall be taken within the first hour but not later than 24 hours of the discharge.

[d] See Parts I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

[e] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods

8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

There shall be no discharge of tank bottom waters.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:

- A. Technology (e.g., Federal Effluent Guidelines)
- B. Water Quality Standards (9 VAC 25-260 et. seq.)
- C. Best Professional Judgment

*STORM REGS.-- CATEGORIES THAT REQUIRE MONITORING: [PICK AS APPROPRIATE]

- | | | |
|----------------------------------|---------------------------------|--------------------------------|
| (1) Timber Products | (15) Motor Freight, Passenger, | (23) Printing & Publishing |
| (2) Paper & Allied Products | Rail, U.S. Postal | (24) Rubber, Miscellaneous |
| (3) Chemical & Allied Products | Transportation & Petroleum | Plastic Products & |
| (4) Asphalt Paving/Roofing | Bulk Oil Stations and | Miscellaneous Mfg. |
| Materials & Lubricant | Terminals | (25) Leather Tanning & |
| (5) Glass, Clay, Cement, | (16) Water Transportation With | Finishing |
| Concrete & Gypsum Products | Maintenance and/or | (26) Fabricated Metal Products |
| (6) Primary Metals | Equipment Cleaning | (27) Transportation Equipment, |
| (7) Metal Mining (Ore Mining & | (17) Ship/Boat Building or | Industrial or Commercial |
| Dressing) | Repairing | Machinery Mfg. |
| (8) Coal Mines & Coal Mining | (18) Vehicle Maintenance, | (28) Electronic & Electrical |
| Related | Equipment Cleaning or | Equipment and |
| (9) Oil & Gas Extraction & | Deicing Areas At Air | Components, Photographic |
| Petroleum | Transportation Facilities | & Optical Goods Mfg. |
| Refineries | (19) Treatment Works | (29) Nonclassified Facilities |
| (10) Hazardous Waste Treatment, | (20) Food & Kindred Products | |
| Storage, Disposal | (21) Textile Mills, Apparel & | |
| (11) Landfills, Land Application | Other Fabric Products Mfg. | |
| Sites | (22) Wood & Metal Furniture and | |
| & Open Dumps | Fixture Mfg. | |
| (12) Automobile Salvage Yards | | |
| (13) Scrap/Waste Recycling | | |
| (14) Steam Electric Power | | |
| Generating, Inc. Coal | | |
| Handling Areas | | |

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 013, 015, 018 and 021

Outfall Description: Storm water not associated with a regulated industrial activity
SIC CODE: 4911

(x) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

THESE OUTFALLS SHALL ONLY CONTAIN STORM WATER NOT ASSOCIATED WITH A REGULATED INDUSTRIAL ACTIVITY
WHERE NO MONITORING IS REQUIRED. NO PROCESS WATER SHALL BE DISCHARGED FROM THESE OUTFALLS.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 016 and 017

Outfall Description: Regulated storm water runoff from an industrial activity area

SIC CODE: 4911

NOTE: These outfalls represent storm event monitoring for existing process and/or non-process outfalls.

| PARAMETER & UNITS | STORM CATEGORY 1-29* or BPJ | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS [a] | |
|----------------------------------|--------------------------------------|--------------------------|---------|--------------------------------|-----------------------|
| | | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE [c] |
| Flow (MG) | 14 | NA | NL | 1/3 Months | Estima te [b] |
| pH (S.U.) | 14 | NL | NL | 1/Year | Grab |
| TSS (mg/l) [d] | 14 | NA | NL | 1/Year | Grab |
| TPH (mg/l) [d] [e] | BPJ | NA | NL | 1/Year | Grab |
| Dissolved Copper (ug/l) [d] | 14 | NA | NL | 1/Year | Grab |
| Dissolved Zinc (ug/l) [d] [f] | 14 | NA | NL | 1/3 Months | Grab |

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

1/Year = Between January 1 and December 31.

These outfalls are considered substantially identical; 016 may be sampled for 017; sample results shall be reported for both outfalls.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.F.1. for sampling methodology and reporting requirements.

[b] Estimate of the total volume of the discharge during the storm event.

[c] The grab sample shall be taken within the first hour but not later than 24 hours of the discharge.

[d] See Parts I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

[e] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

[f] See Part I.F. for Storm Water Evaluation requirements.

The basis for the limitations codes are:

- A. Technology (e.g., Federal Effluent Guidelines)
- B. Water Quality Standards (9 VAC 25-260 et. seq.)
- C. Best Professional Judgment

*STORM REGS.-- CATEGORIES THAT REQUIRE MONITORING:

- | | | |
|----------------------------------|---------------------------------|--------------------------------|
| (1) Timber Products | (15) Motor Freight, Passenger, | (23) Printing & Publishing |
| (2) Paper & Allied Products | Rail, U.S. Postal | (24) Rubber, Miscellaneous |
| (5) Chemical & Allied Products | Transportation & Petroleum | Plastic Products & |
| (6) Asphalt Paving/Roofing | Bulk Oil Stations and | Miscellaneous Mfg. |
| Materials & Lubricant | Terminals | (25) Leather Tanning & |
| (6) Glass, Clay, Cement, | (16) Water Transportation With | Finishing |
| Concrete & Gypsum Products | Maintenance and/or | (26) Fabricated Metal Products |
| (6) Primary Metals | Equipment Cleaning | (27) Transportation Equipment, |
| (8) Metal Mining (Ore Mining & | (17) Ship/Boat Building or | Industrial or Commercial |
| Dressing) | Repairing | Machinery Mfg. |
| (8) Coal Mines & Coal Mining | (18) Vehicle Maintenance, | (28) Electronic & Electrical |
| Related | Equipment Cleaning or | Equipment and |
| (9) Oil & Gas Extraction & | Deicing Areas At Air | Components, Photographic |
| Petroleum | Transportation Facilities | & Optical Goods Mfg. |
| Refineries | (19) Treatment Works | (29) Nonclassified Facilities |
| (10) Hazardous Waste Treatment, | (20) Food & Kindred Products | |
| Storage, Disposal | (21) Textile Mills, Apparel & | |
| (11) Landfills, Land Application | Other Fabric Products Mfg. | |
| Sites | (22) Wood & Metal Furniture and | |
| & Open Dumps | Fixture Mfg. | |
| (12) Automobile Salvage Yards | | |
| (13) Scrap/Waste Recycling | | |
| (14) Steam Electric Power | | |
| Generating, Inc. Coal | | |
| Handling Areas | | |

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 030

Outfall Description: Regulated storm water runoff from an industrial activity area - coal unloading dock after the first 1.0 inches of precipitation is collected for treatment

SIC CODE: 4911

NOTE: These outfalls represent storm event monitoring for existing process and/or non-process outfalls.

| PARAMETER & UNITS | STORM CATEGORY 1-29 or BPJ | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS [a] | |
|-------------------|-------------------------------------|--------------------------|---------|--------------------------------|-----------------------|
| | | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE [c] |
| Flow (MG) | 14 | NA | NL | 1/6 Months | Estima te [b] |
| pH (S.U.) | 14 | NL | NL | 1/6 Months | Grab |
| TSS (mg/l) [d] | 14 | NA | NL | 1/6 Months | Grab |
| TPH (mg/l) [d][e] | BPJ | NA | NL | 1/6 Months | Grab |

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30); 2nd half (July 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.F.1. for sampling methodology and reporting requirements.

[b] Estimate of the total volume of the discharge during the storm event.

[c] The grab sample shall be taken within the first hour but not later than 24 hours of the discharge.

[d] See Parts I.D.5 and I.D.6 for quantification levels and reporting requirements.

[e] TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007). If the combination of Methods 8260B and 8270D is used, the lab must report the total of gasoline range organics, diesel range organics and polynuclear aromatic hydrocarbons.

The basis for the limitations codes are:

- A. Technology (e.g., Federal Effluent Guidelines)
- B. Water Quality Standards (9 VAC 25-260 et. seq.)
- C. Best Professional Judgment

*STORM REGS.-- CATEGORIES THAT REQUIRE MONITORING:

- | | | |
|----------------------------------|---------------------------------|--------------------------------|
| (1) Timber Products | (15) Motor Freight, Passenger, | (23) Printing & Publishing |
| (2) Paper & Allied Products | Rail, U.S. Postal | (24) Rubber, Miscellaneous |
| (7) Chemical & Allied Products | Transportation & Petroleum | Plastic Products & |
| (8) Asphalt Paving/Roofing | Bulk Oil Stations and | Miscellaneous Mfg. |
| Materials & Lubricant | Terminals | (25) Leather Tanning & |
| (7) Glass, Clay, Cement, | (16) Water Transportation With | Finishing |
| Concrete & Gypsum Products | Maintenance and/or | (26) Fabricated Metal Products |
| (6) Primary Metals | Equipment Cleaning | (27) Transportation Equipment, |
| (9) Metal Mining (Ore Mining & | (17) Ship/Boat Building or | Industrial or Commercial |
| Dressing) | Repairing | Machinery Mfg. |
| (8) Coal Mines & Coal Mining | (18) Vehicle Maintenance, | (28) Electronic & Electrical |
| Related | Equipment Cleaning or | Equipment and |
| (9) Oil & Gas Extraction & | Deicing Areas At Air | Components, Photographic |
| Petroleum | Transportation Facilities | & Optical Goods Mfg. |
| Refineries | (19) Treatment Works | (29) Nonclassified Facilities |
| (10) Hazardous Waste Treatment, | (20) Food & Kindred Products | |
| Storage, Disposal | (21) Textile Mills, Apparel & | |
| (11) Landfills, Land Application | Other Fabric Products Mfg. | |
| Sites | (22) Wood & Metal Furniture and | |
| & Open Dumps | Fixture Mfg. | |
| (12) Automobile Salvage Yards | | |
| (13) Scrap/Waste Recycling | | |
| (14) Steam Electric Power | | |
| Generating, Inc. Coal | | |
| Handling Areas | | |

TABLE II - INDUSTRIAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 031

Outfall Description: Uncontaminated river water from the chlorination buildingSIC CODE: 4911

| (x) Final Limits () Interim Limits | | Effective Dates - | | From: Issuance | | To: Expiration | |
|-------------------------------------|------------------|--------------------------|----------------------|----------------|---------|-------------------------|-------------|
| PARAMETER & UNITS | BASIS FOR LIMITS | MULTIPLIER OR PRODUCTION | EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | | MONTHLY AVERAGE | MINIMUM | MAXIMUM | FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | | | NA | NA | NL | 1/6 Months | Est |
| pH (S.U.) | | | NA | NL | NL | 1/6 Months | Grab |
| Total Residual Chlorine (ug/l) [a] | | | NA | NA | NL | 1/6 Months | Grab |

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/6 Months = In accordance with the following schedule: 1st half (January 1 - June 30); 2nd half (July 1 - December 31).

1/Year = Between January 1 and December 31.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Parts I.D.5. and I.D.6. for quantification levels and reporting requirements, respectively.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

3. There shall be no discharge from strainer cleaning to this outfall.

The basis for the limitations codes are:

1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment